

ABSTRACT OF THE DISCLOSURE

A method of managing a fluid or gas reservoir is disclosed which assimilates diverse
5 data having different acquisition time scales and spatial scales of coverage for iteratively
producing a reservoir development plan that is used for optimizing an overall
performance of a reservoir. The method includes: (a) generating an initial reservoir
characterization, (b) from the initial reservoir characterization, generating an initial
reservoir development plan, (c) when the reservoir development plan is generated,
10 incrementally advancing and generating a capital spending program, (d) when the capital
spending program is generated, monitoring a performance of the reservoir by acquiring
high rate monitor data from a first set of data measurements taken in the reservoir and
using the high rate monitor data to perform well-regional and field-reservoir evaluations,
(e) further monitoring the performance of the reservoir by acquiring low rate monitor
15 data from a second set of data measurements taken in the reservoir, (f) assimilating
together the high rate monitor data and the low rate monitor data, (g) from the high rate
monitor data and the low rate monitor data, determining when it is necessary to update
the initial reservoir development plan to produce a newly updated reservoir development
plan, (h) when necessary, updating the initial reservoir development plan to produce the
20 newly updated reservoir development plan, and (i) when the newly updated reservoir
development plan is produced, repeating steps (c) through (h). A detailed disclosure is
provided herein relating to the step (a) for generating the initial reservoir characterization
and the step (b) for generating the initial reservoir development plan.